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THE EFFECTS OF INCLUSION OF MODERATELY
HANDICAPPED STUDENTS

by
Leslie B. Kahn

A THESIS

Submitted in partial fulfillment of the requirements of the
Master of Arts Degree in the Graduate Division of Rowan College of New Jersey
May 1995

Approved by _____

Date Approved 4/25/95

ABSTRACT

Leslie B. Kahn

The Effects of Inclusion of Moderately

Handicapped Students

1995

Dr. Klanderman

School Psychology

The purpose of this study is to examine the effects of inclusion of moderately handicapped students in three areas. Handicapped students were observed in order to measure: the number of disturbances they caused, the amount of teacher involvement they required, and the type of social interactions they developed. The students chosen for this study had differing disabilities including physical, emotional and learning handicaps. A sample of three second through fourth grade students was studied. All three of the students were from different communities with similar socioeconomic levels. Although results differed based on the particular handicap, on the average, the handicapped students did require more time from their teachers and did cause more disturbances than their regular education counterparts. In regard to the handicapped students social interactions, on the average no difference was found among the handicapped students in comparison to the regular education students.

MINI-ABSTRACT

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School Psychology

The purpose of this study is to examine the effects of inclusion of moderately handicapped students. Variables examined were amount of teacher involvement, number of classroom disturbances, and types of social interactions. Results were different for each student had however, on the average these students do require more teacher interaction, do cause more classroom disturbances, and do not differ in terms of social interactions.

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CHAPTER ONE - THE PROBLEM

Inclusion has become an issue of great interest and controversy over the last few years in the field of education. Most of the research and information that has surfaced on this subject recently has been related to the positive or negative aspects regarding the special education students who are finding themselves included in regular education classrooms more and more frequently these days. It is necessary however to look at the implications caused by inclusion for the regular education student as well as for the special education student. In many cases the use of inclusion benefits all students in the classroom in which it occurs. Many "normal" students learn a great deal socially from the special education students who have entered their learning environment. Many special education students also learn social skills. However, the role of education in our society should focus more on educating our students with knowledge rather than social skills. It is important to look at the changes which must occur in classrooms in order to implement inclusion and determine if those changes are justifiable based on the extent of success which results from the special education students being included in regular classroom.

Purpose

This study will be conducted to determine whether moderately and severely handicapped students will benefit from the use of inclusion in today's schools. It will also try to determine if the process of inclusion is justifiable considering

possible negative and/or positive ramifications for the regular education student. Many worry that too much time will be spent helping the special students or that these students will disrupt or upset the order of the classroom. Others worry that the special education students will be "included" in theory only when in reality they may be left to themselves without any reinforcements or interactions from others. By looking at several examples of inclusion, one should be able to determine the true benefits and disadvantages of inclusion.

Hypothesis

The effects of inclusion on all students involved are not certain. This study will demonstrate what effects such a program will have on regular education students and the moderately handicapped students in their classroom. This hypothesis states that more teacher interaction is necessary for students with moderate disabilities as compared to regular education students. The hypothesis also states that the amount of classroom disruptions being caused by the disabled student as compared to the regular education student is greater. The social benefits of inclusion will also be closely looked at in regard to how well the disabled students are able to adapt socially in a regular education setting. It is believed that the disabled students will have poorer social acceptability and adaptability.

Theory

Rotter's Expectancy-Reinforcement Value Model is a personality theory based on learning concepts and principles. The basic assumptions of this theory are that most of our behavior is learned and it is acquired through our experiences with other people.

Rotter emphasizes the unity or interdependence of personality in which a person's experiences and interactions continually influence one another.

Past experiences influence current experiences and current experiences change the things learned in the past (Ryckman, 1993).

Rotter emphasizes motivation and expectancy as key social learning concepts in his theory. Rotter defines expectancy as a cognition or a belief about the property of some object or event (Ryckman, 1993). These expectancies can differ greatly in size and they usually change somewhat with new experiences. Rotter's theory also involves motivation. He describes motivation as human behavior which is goal directed. People strive to maximize rewards and to minimize or avoid punishment (Ryckman, 1993).

According to Rotter's theory, any behavior which has been associated with a high reinforcement value will result in an increased likelihood of an expectancy. Therefore, each expectancy is based on past experience. Expectancies vary in terms of their generality; that is, we may acquire generalized expectancies. The special education student is motivated and expected to attain certain goals when placed in the regular education setting. In addition, the regular education student is expected to treat the included student in a certain manner. Through interaction and involvement, the students (both regular and special) learn a great deal about each other. They are rewarded when they display appropriate behaviors towards each other.

According to Bandura, behavior is not caused solely by either inner forces or environmental influences. Like Rotter, Bandura believes that behavior occurs as a result of a complex interplay between inner processes and environmental influences (Ryckman, 1993, p. 227).

Bandura's work emphasizes the role played by cognition in the acquisition, retention, regulation, maintenance and modification of behavior. He sees reinforcement as a way of giving people information about different kinds of

behaviors they must do in order to gain worthwhile outcomes and avoid punishing outcomes. A key point in Bandura's theory is his belief that people learn by example. That is, we watch others and then imitate their actions. There are several factors which must be taken into consideration when judging the effectiveness of modeling. First, one must consider the personality characteristics of the model and the observer. Another consideration is the prior experiences of the observer. Through research, it has been shown that people are likely to learn more from a model's behaviors when the model is similar to them in terms of personal background and physical appearance.

With these conditions in mind, one is able to see problems within inclusion. It is possible that regular education students will not be able to associate themselves with the special education students. The same may hold true for the special education students. Therefore, students in an inclusive classroom may have problems relating to each other and may not be able to learn anything from each other.

Inclusion started more than 15 years ago when federal policy required school districts to consider placing a child with disabilities in a regular classroom setting. This change was a result of Part B of the Individuals with Disabilities Education Act (IDEA)-Public Law 94-142. The placement of the student would usually require the use of supplementary aids and services. This placement was required before the school district was allowed to explore other more restrictive alternatives.

Inclusion refers to the opportunity for all students to participate in the totality of the school experience. It includes integration into regular classrooms in neighborhood schools for both educational and social opportunities. More than this, however, it means that students with mental retardation participate in or attend

extracurricular activities such as sports and school plays, eat and socialize with peers in the school lunchroom, and engage in other school activities from which they are often excluded (Davis, 1992). Legal support for inclusion of students with severe disabilities can be found in *Brown v. the Topeka Board of Education* (1954) and *Daniel v. Board of Education* (1989). This legislation states that schools must provide students with disabilities free and appropriate educational services. Students with disabilities must have the opportunity to engage in the same general educational settings as students without disabilities whenever possible. They must also be provided supplemental services to fit their individual needs (Alper & Wisniewski, 1994).

There are three main arguments that inclusionists frequently use in order to defend their case. The first argument states that all children learn best in the regular education classroom. The second argument deals with social equity. It emphasizes keeping children mixed with their peers as a goal of social equity which is more important than how much children learn. The last argument states that pull-out programs are a violation of the special needs children's civil rights because these pull-out programs segregate the special needs children from their peers (Rasch, Smelter & Yudewitz, 1994).

In its 1990 position on education, the Association for Retarded Citizens of the United States (ARC), affirmed some basic principles which portray the feelings of the organization on the topic of inclusion of students with mental retardation. Some of these principles are:

- * All schools should value all students and include them in all aspects of school life.
- * Preparation for life in the community best occurs when all students of different backgrounds and abilities learn and socialize together in

classrooms and other school settings where all have a chance to achieve and receive instruction designed to develop and enhance successful living within the community.

- * Each student with a disability belongs in an age-appropriate classroom with peers who are not disabled.
- * Each student has the right to receive individualized education which provides choices, meets the student's needs, and offers the necessary support (Davis, 1992).

Research has shown that there have been positive benefits of inclusion to both children with disabilities as well as their non disabled peers. One of these benefits are that students with disabilities are able to reach a higher number of their individualized education program goals in inclusive settings. Another benefit is the student with disabilities can gain a sense of the expectations and diversity of society. Students without disabilities gain an opportunity to appreciate the abilities and strengths of their classmates who do have disabilities (Davis, 1992).

Inclusion is being used more and more frequently in schools today.

However, there are still many barriers which need to be looked at and overcome. One obstacle is the attitudes that persons without disabilities have toward students with severe disabilities (Alper & Wisniewski, 1994). In general, attitudes may be modified by gaining experiences with children who have severe disabilities and by gaining information about their abilities (Alper & Wisniewski, 1994). Students without disabilities learn to appreciate and accept individual differences and to appreciate the abilities and strengths of their classmates with disabilities (Davis, 1992). Another obstacle is the concerns of the teachers. Intervention strategies which focus on attitudinal change must also include the concerns of the teachers (Alper & Wisniewski, 1994). Many people also feel that inclusion produces larger

classroom sizes. These people also feel that this creates further problems because research has shown that children learn better in smaller rather than larger groups. Some educators are also upset about what others consider to be social benefits of inclusion. These educators feel that people are placing too much emphasis on social as opposed to academic aspects of the school environment. One last argument against inclusion relates to the civil rights of the special education students. This argument states that if these children are entitled to equal education then, the idea of a least restrictive environment is in violation of their constitutional needs (Rasch, Smelter & Yudewitz, 1994). This argument would mean that all pull-out programs are in essence unequal and therefore illegal.

Inclusion is an extremely controversial topic in education today. It is something that is going to be looked at and researched from many different angles in the next couple of years. There are many benefits to be gained from inclusive classrooms. The educators of today will need to examine the pros and cons of such a program very closely to determine whether its implementation or removal is necessary in today's education systems.

Assumptions

There are a few assumptions which were made as a part of this study:

1. The sample used in this study is representative of a middle class elementary school population. For purposes of this study, this population is being treated as if it were representative of all elementary populations.
2. The observations were conducted on three separate days. The environmental conditions of all observation sites were relatively stable across all observation sessions.

3. Each of the teachers involved in the study must be assumed to be equally invested in participation of inclusion for their classroom, students and school. This ensures equity of instruction and attention for all of the students involved in the study.

Limitations

1. The study is only looking at three cases.
2. The cases that are being looked at are from similar socioeconomic levels.
All three of the cases are from upper middle class areas.
3. The study is only looking at students from the elementary school level.
4. The observation period for each of the students is limited to a four hour period.

Definitions

Attention Deficit Hyperactivity Disorder - a diagnostic category of the American Psychiatric Association DSMIII for a condition in which a child exhibits developmentally inappropriate inattention and impulsivity (Haring, Haring, & McCormick, 1994).

Emotionally Disturbed - a mental disorder in which chronic, inappropriate emotional reactions predominate (Chaplin, 1985).

Expectancy - A cognition or belief, held with a higher or lower degree of certainty, about the property of some object or event. (Ryckman, 1993).

Inclusion - an education philosophy based on the belief that all students are entitled to fully participate in their school community (Cook & Friend, 1993).

Motivation - an idea that humans strive to maximize rewards and minimize or avoid punishment (Ryckman, 1993).

Regular Class - includes students who receive a majority of their education in a regular class and receive special education and related services for less than 21 percent of the school day (Davis, 1992).

Reinforcement Value - Importance of a given reinforcer to an individual in relation to other reinforcers if the probabilities of attaining them are all equal (Ryckman, 1993).

Resource room - includes students who receive special education and related services for 21 to 60 percent of the school day (Davis, 1992).

Separate class - includes students who receive special education and related services for more than 60 percent of the school day (Davis, 1992).

Overview

Having now discussed the essentials of the problem facing the field of education in relation to inclusion, the theories of personality structure related to rewards and behavior, the terms which will be used throughout the exploration of our topic, and the underlying assumptions and limitations of the current research, we may proceed to matters more directly related to the characteristics of the subjects in this study.

To begin, in Chapter two, we will look at the relevant psychological literature concerning the relationship between inclusion and success for the disabled student as well as for the regular education class. In Chapter three, the actual design and methodology of the current study will be presented at length. The various tools of measurement will be discussed, and working, testable hypotheses will be presented. Chapter four will present the data obtained through the procedures listed in Chapter three, with an analysis and interpretation. Finally, in the last chapter, the conclusions which can be drawn from the data in light of the hypotheses will be discussed at length, along with any general considerations and the implications for further research which have developed from this study.

CHAPTER TWO

REVIEW OF LITERATURE

Inclusion is an extremely controversial topic in our country at the current time. It seems that a person can pick up any newspaper or magazine and find an article, a legal ruling or an editorial letter regarding this topic. When a person begins to look at the information in print on this topic, one can easily see the different viewpoints and issues related to inclusion. Perhaps most important are the legal decisions regarding this subject. A possible reason why inclusion is so commonly discussed is because of all of the legal changes occurring within the country to try to make education more equitable for all. In order to fully understand all of the implications of inclusion, one must be abreast of the current legal decisions.

It is also important to understand that inclusion is a topic of much disagreement. There are groups on both sides that feel very strongly either for or against inclusion. There are others who see inclusion as having many benefits but not being for all students in all cases. By looking at different people's viewpoints, one can see deeper into the issue. A further look into the topic by all sides can result in a better understanding of the issues and complexities of inclusion.

LITERATURE REGARDING LEGAL ASPECTS OF INCLUSION

In a report titled, "Separate and Unequal", the Developmental Disabilities

Council reported their feelings and beliefs about inclusion. Overall, the report stated that inclusion is not being used widely enough in New Jersey schools. In fact, the report emphasized the fact that New Jersey schools are too quick to place students in special classes. The Code of Federal Regulations, Section 300.550(B) mandates,

Special classes, separate schooling or other removal of children with disabilities from the regular educational environment can occur only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily (Developmental Disabilities, 1994).

The report provides statistics which demonstrate that special classes are being used far too frequently in New Jersey.

The report also states that since New Jersey's inception of special education services in 1954, the state has been leaning toward a more and more restrictive environment for its students. Since the passage of PL 94-142, New Jersey has constructed 10 regional day schools that serve only children with disabilities (DDC Report, 1994). In addition, the state has ranked fourth or fifth highest in placement of children in separate schools. In order to improve this situation, New Jersey's Department of Education has sought the help of national experts on inclusion for the last three years. However, this has not resulted in any improvement for New Jersey students.

The report states several obstacles to desegregation. One of the obstacles is funding. This is a problem because New Jersey allows more money for a student with a disability who is placed in a segregated special education class which is specifically designed for similarly disabled students (DDC, 1994). Another problem is that state law currently only refers to segregated educational

placement options and does not mention that a possible placement is in a general education classroom with supplementary aids and services (DDC, 1994). The report also refers to several other obstacles which tend to prevent New Jersey educators from placing students in general education settings more frequently. They also mention problems with the special education code, failure to monitor for least restrictive environment, personnel preparation and family education.

Several recommendations for improvements are mentioned in the report written by The Developmental Disabilities Council.

Current research suggests that integrated placements improve the academic and social performance of all students and increase the chances for students with disabilities to find gainful employment in later life (DDC, 1994, p. 13).

Some of the recommendations that are mentioned are for immediate consideration. One such recommendation is to circulate a policy statement emphasizing the Department's commitment to providing fully inclusive educational opportunities. The Council also suggests writing a specific plan which contains actual activities and goals which will result in an increase in the percentage of students who are taught in regular education classes. The long term goals mentioned in this report were the most important. They stated that the New Jersey Department of Education must develop monitoring procedures to secure regular obedience of the least restrictive environment provisions stated in PL 94-142. Another extremely important recommendation made was for the state to develop funding which will permit educational aid to be given and used by school districts to educate students in all environments. More importantly, this funding must be made available regardless of the label of the student (DDC, 1994).

In the first chapter of Patricia Anthony and Stephen Jacobsons' book

Helping At-Risk Students: What are the Educational and Financial Costs, they discuss the Individuals With Disabilities Education Act. Approximately 11% of the student population of the U.S. is made up by students with disabilities. Since the enactment of the early childhood amendments in 1982 (p.L. 99-457), the number of students is growing larger than the already large 4 million who receive special education services. Some changes took place in P.L. 94-142 when its name was changed from the Education for All Handicapped Children Act to the Individuals with Disabilities Education Act (IDEA). The basic ideas of the law remained providing a free appropriate public education, an individualized education program, special education services, related services, and placement practices. Under the new title, any student who needs special services is qualified for them. Therefore, it is impossible for any child with any disability to be denied special services.

One of the most important facets of IDEA is that it states that education should occur in the least restrictive environment. This means that students with disabilities, regardless of what type of educational environmental they are in, are to be educated with non-disabled children. It also states that when disabled students are educated in special classrooms, separate schools or away from non-disabled children it is because the severity of the disability is such that appropriate education cannot be achieved in regular classes with the use of supplementary aids and services. This requirement refers not only to educational classrooms but also to extracurricular activities and nonacademic classes. Anthony and Jacobson add that school districts must not be too ambitious in trying to get all students into general education classes, they first must try to ascertain what is truly in the best interest of the child (Anthony & Jacobson, 1992).

The ARC describes certain problems with inclusion in a report on inclusion

in education of students with mental retardation. Davis begins by stating why inclusion is important to the ARC. She states that inclusion means not only students being able to attend classes with non-disabled students but also being able to attend or participate in extracurricular activities and socialize with peers and generally to be able to involve themselves in activities which they previously could not. Davis believes since part B of IDEA has been policy, schools have interpreted the law to mean that segregated settings are appropriate placements for students (Davis, 1994).

This report states several benefits which occur as result of students with disabilities being placed in regular classrooms. One advantage is that students with disabilities meet an increased number of their individualized education program goals in a regular classroom. Many of the advantages pertain to the mind set of the disabled student such as being more motivated and developing appropriate peer relations and social behaviors. The ARC believes that after considering these benefits, inclusion does not need to be justified in any way other than a being a true matter of human dignity and civil rights (Davis, 1994).

In a table which presents the number of disabled students who are placed in different educational settings for the school year 1989-90, the percentages show that only 6.7% of these students were placed in regular classes. Placed in separate classes were 61.1% of the population. The use of resource rooms accounted for 20.1% of the group. The report continues to display more specific statistics on the percentages of students in each type of educational setting for each state in the United States. Overall, the attitude of the ARC is that not enough of this nations students are getting the advantages of being placed in the least restrictive environment (Davis, 1994).

LITERATURE IN FAVOR OF INCLUSION

Alper & Wisniewski (1994) believe that inclusion can be successful for students with severe disabilities. The results from several studies demonstrate that students with severe disabilities can be given productive educational services in regular education classrooms through the use of support services.

These studies have documented that inclusion benefits students with severe disabilities by providing increased opportunities for communication and social interactions, as well as providing models of age-appropriate social behavior (Alper, & Wisniewski, 1994).

The question is no longer where to place these children but rather how to best meet their needs in the regular education setting. An important step in meeting the students needs is to first overcome any attitudinal barriers that either the teacher or classmates may have. Attitudes may be changed through experiences with children who have had severe disabilities and by learning more about their abilities. There are many changes that must be well thought out in order to implement an effective inclusion program. In order to be effective in this change, a school district must look at the entire process very closely in order to be certain that the result will be a positive one.

Barnhart, Huang, Mellblom, & Pearman (1992) conducted a study which evaluated people's beliefs about inclusion. The purpose of the study was to survey the beliefs and attitudes regarding the inclusion of all students in the school community in a mid-sized Colorado school district. This survey consisted of three scales; incentives that might be valuable in encouraging inclusion of all students, attitudes and perceptions about educating all students, and areas that may be causing concern for educators. However, this report only discusses the attitudes and beliefs scale.

The survey was conducted by using a four point Likert response scale. Demographic information was also included on the survey. There were 558 surveys sent out. A response rate of 44% for all district respondents was achieved. Barnhart, Huang, Mellblom, & Pearman (1992) found no significant differences in the results when comparing school, job position, and education level of the respondent. However, they did find a lower rate of agreement for males than for females. They attributed this to the fact that more females are classroom teachers and therefore have more definite beliefs about the presence of "entitlement program" students in the classroom. The results of the survey were somewhat contradictory but, seventy percent of the respondents agreed or strongly agreed with the statement that inclusion would work well in their school. Seventy-three percent agreed or strongly agreed that students in the school would accept disabled students into their classrooms.

These results propose that education be restructured and moved from the parallel systems of regular and entitlement programs to an all inclusive educational program where each student is valued and treated and taught as an individual (Barnhart, Huang, Mellblom, & Pearman, 1992).

LITERATURE OPPOSED TO INCLUSION

Baines, Baines, & Masterson (1994) conducted a study to determine teachers thoughts pertaining to the effects of mainstreaming (inclusion). This survey was given at the end of the school's third grading period. Approximately one half of the schools' teachers responded to the five page, seventeen question survey.

The first six questions of the study asked teachers about their schedules,

years of experience, frequency of meetings per week, and their educational background. The remaining eleven questions called for the teachers to write responses to inquiries about their experiences they have had with mainstreamed students. Of the people who answered the survey, only 10% were first year teachers. A very important finding in the study was that very few teachers had actually received training in dealing with special education students. Every teacher who responded to the survey, stated that teaching special education students takes more time than teaching regular students. Two-thirds of all teachers responded that they spent additional time each week making modifications to their lesson plans just for the special education students. One teacher responded by saying that mainstreaming was making teachers leave the classroom.

A very important question asked teachers to relate some of their experiences with mainstreamed students. The responses indicated a real problem in the role these students play in their classes. Of the responses, 85% reported verbal abuse by a student, 90% reported instances of mischievous conduct or disobedience and 90% reported a total disruption of the class (Baines, Baines, & Masterson, 1994). It is also important to note that 80% of the respondents stated that their administration was doing nothing to help them improve situations.

From the results of this study, the American Federation of Teachers moratorium on mainstreaming seems well based. It stated that mainstreaming has definitely changed what teachers are able to teach and how. More importantly, AFT believes that the statement, "all children can learn" and the policy of mainstreaming do not consider the cost to the regular education students.

Rasch, Smelter, & Yudewitz (1994) begin their article by describing the problems in defining exactly what educators believe inclusion to mean. There are

currently many different definitions which range from some special education students attending regular classes to all special education students being a part of regular education classes. The authors continue by stating that exclusion must mean the opposite of inclusion and therefore would lean towards removing students from the regular classroom. They feel that neither an inclusion-only nor exclusion-only stance is correct. This would seem to mean that there would be only one possible solution for every child. Rasch, Smelter, & Yudewitz (1994) believe that what may work for one child may not work for another, and therefore, each child must be dealt with separately. They state that the moral and legal reality of serving children with special needs may result in an educator who finds him or herself as an inclusionist one day and an exclusionist the next. This is also a result of the type of thinking which believes that a classroom is always the least restrictive environment. However, such a belief is not stated anywhere in the IDEA (Rasch, Smelter, & Yudewitz, 1994).

The article states that inclusionists generally use three main defenses. The first defense relates to the idea that all children learn best in regular classrooms. The second defense is that by keeping all students together, the goal of social equity is achieved. The last defense states that pull-out programs are a breach of special education students civil rights. All of these arguments appear invalid. The first argument contradicts the idea that children learn best in small groups. By placing special education students in regular classes, they are in essence being placed in larger groups, therefore diminishing their chances of success. The second argument presents the idea that students' social skills are more important than their academic skills. The purpose of school is to educate, not to socialize. The argument with the last defense is a political one. To say that children have a constitutional right to be in regular education classes means that to put them in

alternative placement is unconstitutional (Rasch, Smeltzer, & Yudewitz, 1994).

Another problem with inclusion is brought up in this article. A situation may arise when a student previously educated in special classes is put in regular classes. When and if the parents compare the services their child has received in both situations, the regular class will probably come up short. The parents then will have the right to demand that the services given in the new class be equal to those given in the special education class.

The authors feel that full inclusion is not state of the art education. Instead, they feel that with a few more changes, the education system of the 1990's will be reinventing the old Victorian schoolhouses (Rasch, Smeltzer, & Yudewitz, 1994).

Although there has not been a great deal of experimental research done on the topic of inclusion, one can gain a great deal of knowledge on the subject by reading the research which is available. Due to the controversial nature of inclusion, one can learn about the differing opinions on the subject through research articles. It appears that the problem of this subject is not going to be resolved for quite some time. It may be necessary to sample a few different alternatives to full inclusion in our schools before the best solution is found.

CHAPTER THREE - DESIGN

Sample

The population used in the study was early elementary students. The students ranged in grade level from first to fourth grade. All students came from suburban public schools in New Jersey. The students selected were labeled moderately handicapped. In certain cases, the child was labeled with the degree of disability because of either a cognitive, emotional or neurological handicap. None of the students included in this population would be termed retarded. Table 3.1 shows the various types of disabilities which were included in this population. The population consisted of 3 students. Table 3.1 shows the students grade level, sex and disability.

Table 3.1 Student Information

Student #	Sex	Grade Level	Disability
1	Female	4	Profoundly deaf
2	Male	3	Emotionally Disturbed
3	Male	2	ADHD

Measures

The observation. In this study, quantity of teacher involvement was measured through observation. The teacher was observed during classroom time. The observation which occurred one time lasted for a period of four hours. The observer took note of how much special attention the teacher was giving to the disabled student in his or her classroom.

The observation was done in a series of time interval observations. Every twenty minutes, it would be noted what the class was working on. More importantly, the actual actions of the teacher and who she was interacting with at the time were also noted. Observations were also taken of the disabled student. Was he or she able to follow along with the class and stay on track with what the class was doing at the time.

There were several issues which were being looked at during the observations. The amount of time during which the student was able to stay on track with the class was very important. In addition, the amount of disruptions which were occurring during class time was also analyzed. The amount of student disruptions as well as who was causing the disruptions was also noted. Last, the amount of attention being given to the students was also considered. An example of the observation form is provided in appendix 3.1. The students social interactions with their peers was noted during the time span in which the observations took place. In particular, it was noted whether the students appeared to fit into their classrooms or whether they had adjustment problems in their social relationships.

Research Design

Three students were selected for a four hour observation. This took place in the students regular classroom. The observer took a seat in the back of each of the classrooms. Every twenty minutes, the observer indicated the time and wrote down exactly what was occurring in the classroom at that time. The observations were conducted over a period of four hours and included classes such as physical education and computers if they were a part of the regularly scheduled day.

Once all of the observations had been completed, they were analyzed individually to determine if there were any common trends running through all of the classroom situations. Since no statistics were able to be done on this sort of information, it was used simply to determine if disabled students resulted in additional time requirements by the teacher and whether these students caused classroom disturbances. The information gathered during these observations will be discussed more fully in the following chapter.

Testable Hypotheses

Testable Hypothesis #1: It was hypothesized that the disabled students would require additional time spent with their classroom instructor.

Null Hypothesis #1: This stated that the disabled students would require less or equal amounts of time from their teachers in comparison to the regular education students.

Alternative Hypothesis #1: This states that the disabled students would require more time from their teacher in order to be successful in the regular classroom.

Testable Hypothesis #2: It was hypothesized that the disabled students would cause more classroom disturbances than the regular classroom students.

Null Hypothesis #2: This states that the disabled students would cause fewer or equal amounts of disturbances as compared to the regular education students.

Alternative Hypothesis #2: This states that the disabled students would cause more disturbances than the regular education students.

Testable Hypothesis #3: it was hypothesized that the disabled students would be less socially accepted by their peers than the regular education students in the class.

Null Hypothesis #3: This states that the disabled students would be equally or more adapted socially in comparison to the regular education student.

Alternative Hypothesis #3: This states that the disabled students would be less adapted socially than the regular education student.

Summary

As can be seen from the preceding description of the procedure used in this study, a group of elementary age New Jersey public school students were observed. The observations were used as case studies to determine whether the inclusion of disabled students in regular classrooms resulted in additional classroom disturbances and/or additional time requirements for the classroom teacher with the disabled student. In addition, the observations provided information about the students social adjustments into regular classrooms.

The upcoming chapters will present the data, highlight the results of data analysis and discuss the conclusions which may be drawn from these.

CHAPTER FOUR - ANALYSIS OF RESULTS

The results of this study will be presented in the order dictated by the hypotheses listed in Chapter Three. Each hypothesis will be restated and then the results bearing directly on it will be presented and discussed.

HYPOTHESIS #1

Null Hypothesis : Disabled students would not require any more time spent with their classroom teachers as compared to the amount of time needed by regular education students

Alternative Hypothesis: Disabled students in regular classrooms would require additional time spent with their classroom teacher in comparison to the time regular education students require from their teacher.

Results

Results in Figure 4.1 show that there was a difference in the amount of time that certain of the disabled students required from their teachers. It must be noted that the amount of teacher time for the regular education students indicated in Figure 4.1 include the time required for all of the children in the classroom. The amounts of time indicated on the chart for the special education students includes only the time that each of the particular students required from their teacher. The average amount of time required by the special education students was 3.7 interactions whereas for the regular education student the average amount of interactions was only 0.29 per student.

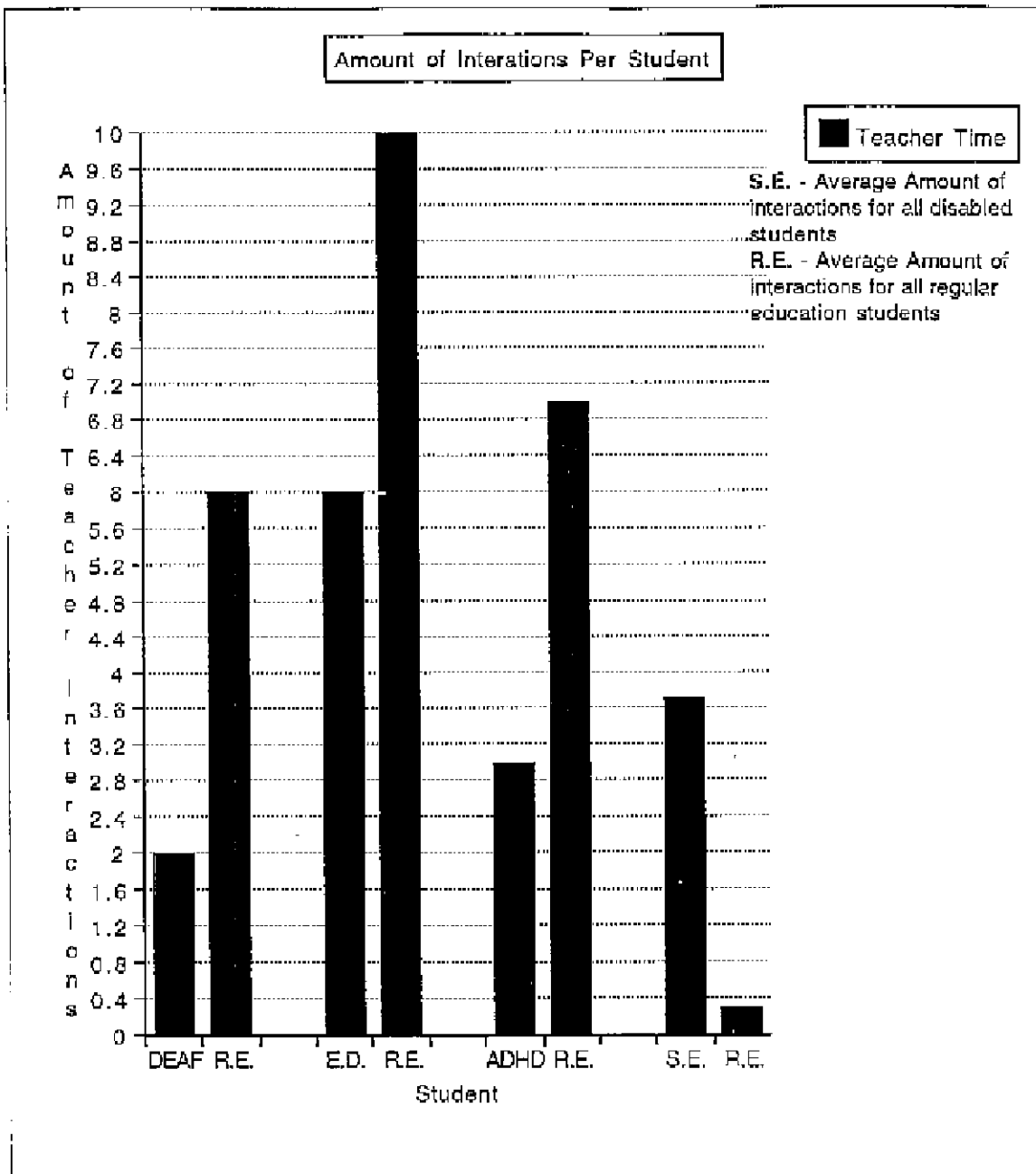


Figure 4.1 Results Hypothesis #1

Discussion

Based on the results shown in figure 4.1 on the preceding page, there is support for the alternative hypothesis stating that the disabled students would require more time from their teachers. It is important to note that there were large differences among the amount of time required from these students. It appears that students with certain disabilities are more easily integrated into regular classroom settings. These findings indicate that inclusion may be an effective alternative for students with certain disabilities.

HYPOTHESIS #2

Null Hypothesis: Disabled students would cause fewer or equal amounts of disruptions and disturbances to the classroom as compared to the regular education students.

Alternative Hypothesis: Disabled students would cause more disturbances in the classroom than the regular education student.

Results

Results in Figure 4.2 show that there was a difference in the amount of disruptions caused by disabled students versus the amount of disruptions caused by regular education students. The disabled students caused an average of 2.3 disruptions in the four hour time period in which they were observed. the regular education students caused an average of 0.1 disturbances each in the four hour time period during which they were observed.

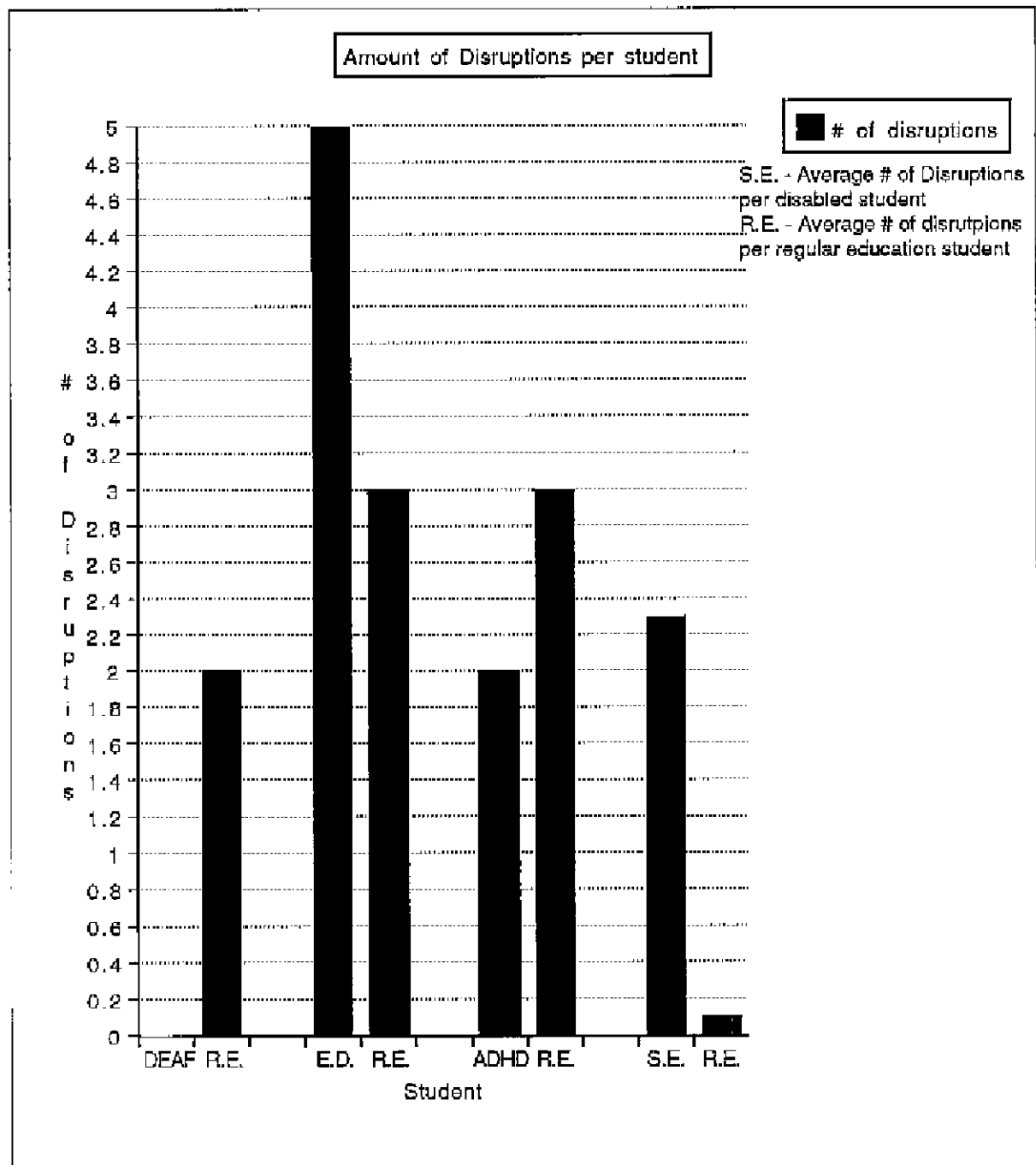


Figure 4.2 Results of Hypothesis #2

Discussion

Based on the results presented in Figure 4.2, there is support for the alternative hypothesis. A difference was found in the number of disabled students causing disturbances in the classroom as compared with the number of regular education students causing disturbances in their classroom. Certain limitations in the design of this study could have affected these results. Perhaps the small sample size which was studied could have affected the results. The different types of disabilities observed may have also had a large impact on the results. Figure 4.2 shows that the amount of disturbances caused by the disabled students varied greatly according to the type of disability the student had.

HYPOTHESIS #3

Null Hypothesis: Disabled students would be as socially accepted as their regular education classmates.

Alternative Hypothesis: Disabled students would be less socially accepted than their regular education classmates.

Results

Results in Table 4.1 show that there was no consistent pattern set for social adaptability among disabled students in this population. As would be expected with any population, there were students who were less socially adapted and there were students who were more socially adapted. Results indicate that the type of disability the student has might be a factor in their individual level of social adaptability.

Student #	Sex	Disability	Social Adaptability
1	F	DEAF	GOOD
2	M	ED/PI	POOR
3	M	ADHD	AVERAGE

Table 4.1 Results of Hypothesis #3

Discussion

Based on the information provided above, there is support for the null hypothesis. There was no difference found in the levels of social adaptability for disabled students as compared to regular education students. There does appear to be a difference in the social adaptability of the disabled students. The results indicate that different disabilities results in different levels of social acceptance for the disabled students among their peers. However, the small sample size may have effected the outcome of this study.

Chapter Summary

Differences were found between the disabled groups of students and the regular education students in two of the three variables observed, with the disabled groups requiring more teacher time and causing more disruptions. With regard to the third hypothesis, there was no difference found in social adaptability and acceptance between the disabled students and the regular education students. In table 4.2 these results are summarized by showing the average number of disruptions for each of the student groups, the average amount of teacher interactions for each of the groups and the average level of social adaptability for each of the groups. In addition, the table states rejection or no rejection of each of the three null hypothesis.

Hypothesis	Disabled Students	Regular Ed. Students	Result
Amount of Teacher Interactions	3.7	0.3	Support for Alternative Hypothesis
Number of Disruptions	2.3	0.1	Support for Alternative Hypothesis
Level of Social Adaptability	Average	Average	Null Hypothesis Supported

Table 4.2 - SUMMARY OF RESULTS

CHAPTER 5 - SUMMARY AND CONCLUSIONS

Summary

The purpose of this study was to determine if placement of a disabled student in a regular education classroom (the process of inclusion) would result in negative ramifications for the classroom as well as for the disabled student. After observing three students, of varying disabilities, in a regular education setting three variables were examined. The first of these variables examined whether or not a disabled student included in a regular classroom would require more of the teachers time then the average regular education student in the class. The second variable studied analyzed whether or not the disabled student would cause more classroom disruptions than the regular classroom student. Third, the social acceptability and adaptability of the disabled student was compared to the regular education student.

In order to determine whether or not the two groups differed in regard to these three variables, time interval observations were conducted (for example of observation form, see the appendix). All three of the variables were documented on regular twenty minute intervals. The results for each of the groups were totaled and compared to one another. Results were different for each of the three students on each of the three variables. Therefore, the results for all of the disabled students were averaged together and then compared to the average results for all of the regular education students in the classroom. Differences between the two groups were found on the first two variables; amount of teacher involvement, and amount of classroom disruptions. No difference between the two groups was

found in relation to social acceptability.

Conclusions

There are a number of conclusions which can be drawn from the results of this study.

1. Because the results were different for each of the disabled students, it appears that students with certain disabilities fit more easily into regular education settings. When students are being evaluated for classification for special education, the psychological evaluation should be used in addition to the other tools currently used in order to determine how easily each individual child will adjust into a regular classroom setting. Although legislation states that students with disabilities must be provided the opportunity to engage in the same educational settings as students without disabilities, it is also stated that these services must suit their individual needs (Alper & Wisniewski, 1994).

2. It appears that students with certain disabilities need less teacher time than students with other disabilities. It was assumed that the deaf student would have needed more help from her teacher than the other two students. However, this was not the case. Each student will react differently to each disability and it appears that some students with less handicapping disabilities often need more assistance than students with more severe disabilities.

3. Based on the three students observed in this study, there appears to be no real difference between the social adaptability levels of students with disabilities as compared to regular education students. The three students observed resulted in three different levels of social adaptability resulting in a level which would be considered average. This appears to be no different from what would be expected from any other group of students. In all groups of students, there are some who appear to have many more friends and other who appear to

have less friends than others. Many feel that the social benefits of inclusion for all students far outweigh any disadvantages that may be results of the inclusion process. Some feel that a benefit of inclusion is that the students with disabilities can gain a sense of the expectations and diversity of society. Students without disabilities gain an opportunity to appreciate the abilities and strengths of their classmates who do have disabilities (Davis, 1992).

Discussion

There were no true relationships found between any of the hypothesized variables and the group of disabled students. However, relationships were found between individual members of the disabled group and two of the three hypothesized variables. From these results, it is safe to assume that inclusion is not always the best option for all students with disabilities. Several factors must be taken into consideration when looking at alternative placements for a child with a disability.

There are several factors which have been influential in the results of this study. It is important to mention these factors in order to correctly interpret the results of this study.

First, it must be noted that the observations were done in three different schools. As a result, three different teachers were observed while observing the disabled students. Every teacher has a different teaching style just as every student has a different learning style. It is essential that teachers provide students with a variety of ways to learn so that the students' learning is in harmony with their backgrounds (Bennett, 1990). Students differ in rates and styles of learning, and schools have limited capacity to respond to these differences (Slavin, 1990). It is possible that some of the results gained during observation would have been

different if the student was placed in another regular classroom with another regular education teacher.

Second, the students who were observed causing a great number of disruptions in their classrooms might not have behaved in the same manner on another day. The limited time of the observation also contributed to results which may not be true indicators of the child's behavior. Therefore, the generalizability of the results are in question. Funder and Colvin (1991) have noted that behavior can be elicited or triggered by specific situational stimuli which are not likely to occur across a broad range of situations (Cohen, Smith, & Swerdlik, 1992). Increasing the amount of time of the observations as well as discussing the child's behavior with his or her teacher as well as other class members would have enhanced the study of the student's behavior in a regular classroom setting.

Third, and most important, each of the students observed had a different disability. Inclusion will not work for all students with disabilities. The Learning Disabilities Association supports the appropriate inclusion of students with learning disabilities in the regular classroom based on the statutory requirement to assess the individual needs of the student and to make placement and support services judgments accordingly (Learning Disabilities Association, 1994). If all of the students observed had the same disability, the results may have been able to be generalized more easily to other students with that same handicap. However, the results from this study can only give an idea of how all students with different disabilities react and participate in regular classroom settings.

Implications for Further Research

CONTROL FOR TYPE OF DISABILITY. As already mentioned in the preceding discussion, it would be beneficial to reevaluate the hypothesis in this study, controlling for type of disability. Also, it might prove helpful to also control for type of learning style. Each student, learns differently and is better suited to a particular type of classroom environment. It is possible that when controlling for type of disability, results may show that students with certain types of disabilities learn best one way and students with other type of disabilities learn best in other ways.

INCREASE DURATION OF OBSERVATION. This study could also have been enhanced by utilizing a longer observation period. As mentioned earlier, students behavior may be different on different days. If the observations were conducted over a longer period of time, a baseline for behavior and personality could have been obtained provided more reliable research results.

OBTAINING A MORE HETEROGENEOUS SAMPLE. The sample used in this study was very heterogeneous in terms of the students disability. However, the socioeconomic backgrounds of the students and schools involved in this study was very homogeneous. Perhaps, if a broader range of socioeconomic status was employed, different results would have been acquired.

OBTAIN A LARGER SAMPLE SIZE. Since only three subjects were employed in this study, the generalizability of the results is rather limited. In addition, only three grades level were involved in this study (all at the elementary level). Future studies would undoubtedly benefit from using a larger and more diverse sample of students.

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APPENDICES

Appendix 1

Sample Observation Form

TIME:

FOCUS OF CLASS WORK:

WHAT TEACHER IS DOING?

WHAT STUDENTS IN THE CLASS ARE
DOING?

TYPES OF INTERACTIONS:

WHAT STUDENT IS DOING?

IS ATTENTION BEING PAID TO TEACHER BY
CLASS?

IS ATTENTION BEING PAID TO TEACHER BY
STUDENT?

ARE THERE ANY DISRUPTIONS?

WHO IS CAUSING THEM?

ARE THERE SOCIAL INTERACTIONS AMONG
ALL STUDENTS IN THE CLASS?

TIME:

FOCUS OF CLASS WORK:

WHAT TEACHER IS DOING?

WHAT STUDENTS IN THE CLASS ARE
DOING?

TYPES OF INTERACTIONS:

WHAT STUDENT IS DOING?

IS ATTENTION BEING PAID TO TEACHER BY
CLASS?

IS ATTENTION BEING PAID TO TEACHER BY
STUDENT?

ARE THERE ANY DISRUPTIONS?

WHO IS CAUSING THEM?

ARE THERE SOCIAL INTERACTIONS AMONG
ALL STUDENTS IN THE CLASS?

Appendix 2 - Student and Class Information

Student #	Sex	Grade	Disability	# of Students in Class
1	F	4	Deaf	29
2	M	3	Emotionally Disturbed	25
3	M	2	Attention Deficit Hyperactivity Disorder	26

Appendix 3 - Teacher Interaction per Student

	# of Interactions	Total Interactions for Regular Students in class	Average Interactions for regular class students
Student 1	2	6	0.21
Student 2	6	10	0.40
Student 3	3	7	0.27
Total	11	23	0.29

Appendix 4- Disruptions per Student

	# of Disruptions	Total Disruptions for Regular Students in class	Average Disruptions for regular class students
Student 1	0	2	0.07
Student 2	5	3	0.12
Student 3	2	3	0.11
Total	7	8	0.10s